



Charting a Path

Perhaps you've owned and cherished woodlands for many years. Or maybe you only recently acquired property, and you're just starting to learn what makes it special. No matter where you are on your ownership journey, a forest stewardship plan can help you make well-informed decisions. It can save you time, money, and effort, and advance desirable long-term outcomes.

This guide helps you focus on high-priority goals for your 10-year forest stewardship plan, and to identify secondary goals as well. It provides questions to ask your forester, and explains terms in the Landowner Goals Form, a planning worksheet published by the Department of Conservation and Recreation (DCR) that you should fill out in draft form prior to meeting with your forester.

The process of setting goals can be daunting, but it doesn't have to be. Your goals for your woods can be modest in scope, or require significant change. They can have easily measurable, short-term results, or involve a sustained commitment for many decades. They may complement each other, but it's also possible to choose otherwise incompatible goals and apply them selectively to different parts of your property, or to give them precedence at different times within your plan's 10-year term.

What's most important is that you choose goals that reflect your interests, and that you and your forester discuss them early in the planning process. Working together, the two of you can identify key features or aspects of your woods to maintain or change, and develop specific strategies to achieve those outcomes.

So how to start? A good first step is to take an inventory of how you enjoy your land right now, and why you value it.

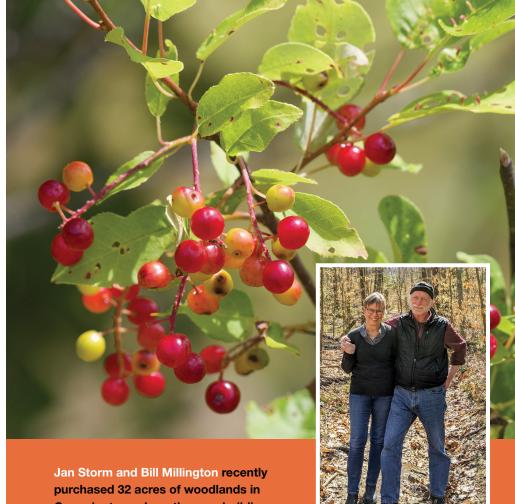
First Steps

When your forester surveys your property, they document characteristics such as tree species and size, soil type, and wildlife habitat. This is essential for understanding your woods' current condition. Likewise, as a landowner, you can inventory the ways that you currently use and value your land.

Here are some questions to consider before you select priority goals. You may want to jot down your answers on paper.

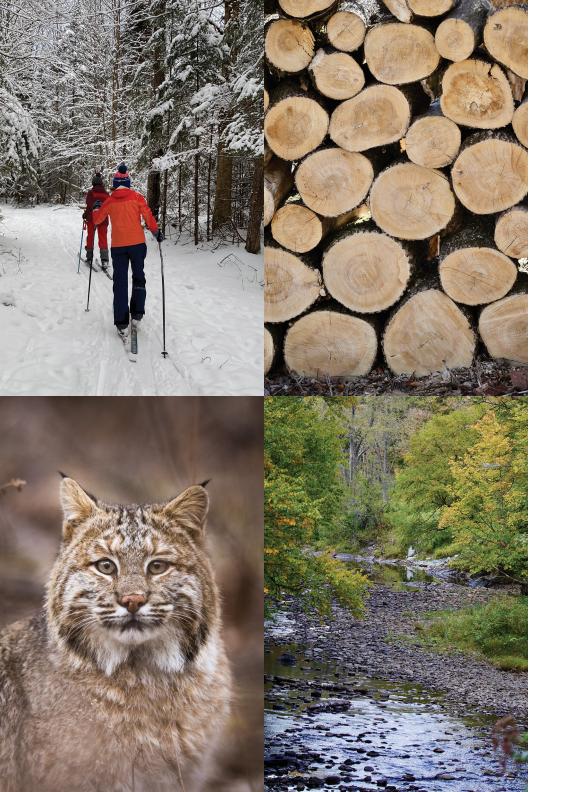
- Why do you cherish your woods?
- When you're in your woods, where do you like to go?
- Which special features appeal to you?
- Is there wildlife that you especially like to see? Are you interested in providing a diversity of habitats?
- What are your favorite recreational activities in your woods? Do other people enjoy spending time in your woods?
- How much are you relying on your woods as a source of income, now or in the future?
- Are you growing timber, or using wood for other purposes such as firewood?
- How much do you think about your woods' contributions to the surrounding landscape? To keeping water clean?
- Do you value your woods as a way to store or sequester (take up from the atmosphere) carbon?
- Are you concerned about climate change impacts on your woods?
- Have you made any plans to build on the property? Have you set aside a house site?
- Have you made other long-term plans, for example, a conservation restriction or estate plans that include your land?
- Do you have any plans for your woods in the next 12 months?

After you've spent some time thinking through questions like these, try to identify three to five aspects of your woods that are especially important to you. For each one, consider whether you are satisfied with your property as it is now, or if you would like to see improvements.



Cummington, where they are building a small, "close to net-zero" house. They want

to maintain mature stands of eastern white pine and red spruce, keep an old logging road open, and possibly build new trails. As the couple prioritizes goals, they are exploring different ways to sequester and store carbon, and enhance and diversify bird habitat, including planting native berry-producing shrubs. They also want to maintain forest health, for example, through selective thinning, and by preventing invasive plants from spreading on the property. There are some beech trees in their woods that appear to be resistant to beech bark disease; they plan to retain these, as well as mature trees that are producing large nut crops for wildlife. Their forester is helping them to understand what they have and what they may want to change. "When she did the inventory for our forest management plan," said Bill, "we followed her around, and she answered all our questions."



Choosing Your Way

Now that you've considered how you currently enjoy your land and why you value it, you're ready to do some creative thinking about the future. On the next two pages, you'll see a list of the 20 goals in the Landowner Goals Form. Most of these goals fit within four basic landowner types or interest categories.

Outdoor Recreationist: Your land is your getaway, playground, and gym. You and your family value its trails, its views, and the many recreational opportunities it offers, from walking to activities such as cross-country skiing or hunting. You may cherish spending time alone in the woods, or value your land as a hub for social gatherings.

Working Woodlands Owner: Whether you're planning long-term timber production, harvesting firewood, practicing agroforestry, or renting out campsites to weekend visitors, you value your land as a renewable resource. You enjoy direct or indirect financial benefits from your woods and take pride in your land's contributions to the local economy.

Wildlife Steward: You care for your woods in order to nurture living things, both plants and animals. You enjoy seeing wildlife, whether you're peering at birds through binoculars, or reviewing trail camera photos of deer, foxes, or bobcats. You want your woods to provide food and habitat for a diversity of species.

Nature's Ally: You are interested in your woods' contributions to larger natural systems that are under stress from rapid change. You want to protect water quality, and you value the ways that forests store and sequester carbon. You're keen to help your woods adapt to stressors such as warmer temperatures, extreme weather events, and invasive pests.

Below are 18 of the 20 goals from the Landowner Goals Form. The remaining goals, Lower Property Taxes and Protect Land from **Development**, are discussed separately on the opposite page.

In subsequent pages, you'll have the opportunity to explore each interest category more deeply and to consider ways that different goals can complement each other. You'll see suggestions for questions to ask your forester and meet landowners who are managing for a variety of 10-year outcomes.

Outdoor Recreationist	Improve access for walking/skiing/recreation Improve hunting or fishing Maintain or enhance privacy Preserve or improve scenic beauty Protect special features, including those of historical or personal significance
Working Woodlands Owner	Enhance the quality and/or quantity of forest products* Practice agroforestry Produce income from timber products, or other products and services Produce firewood for personal use
Wildlife Steward	Enhance habitat for birds Enhance aquatic habitat in streams, ponds, and other wetlands Enhance habitat for wildlife Promote diversity of plant species and habitat types
Nature's Ally	Increase forest resiliency Minimize damage from forest pests Protect water quality Sequester and/or store carbon to mitigate climate change Suppress or eradicate invasive plants

^{*} This is a required priority goal for enrollment in the Chapter 61 current use program

Lower Property Taxes

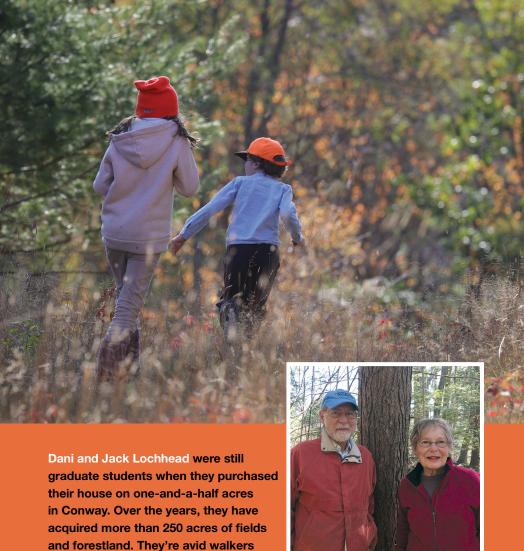
Property is usually taxed for its "highest and best use," which in legal terms usually means its development value. Rising property values, and correspondingly high taxes, can create significant financial burdens. For that reason, lowering property taxes is a priority for many landowners - and often a prerequisite for achieving other goals.

Massachusetts has three programs that give preferential tax treatment to landowners who choose to keep their property open. You should ask your forester which program best suits your goals; however, in general, Chapter 61 applies to land that is being managed to produce forest products. Chapter 61A applies to agricultural and horticultural land. And Chapter 61B applies to land that is managed for open space and recreation, what the state broadly defines as recreational land. Also note that, in order to qualify under Chapter 61, you must list "enhance the quality and/or quantity of forest products" as a high-priority goal. For more information, see the resources listed at the end of this publication.

Protect Land from Development

There are several strategies that you can pursue to keep your woods intact in the long-term. The most common of these is a conservation easement, or conservation restriction (CR), as it is known in Massachusetts. This is a deed restriction in which you retain ownership of your land but donate or sell development rights to a land trust or other entity. An attorney can help you explore this conservation tool and other possibilities, such as a family trust, and consider how your plans fit into other long-term estate planning. The publication *Protecting Your Legacy* (listed on the Resources page) is also a helpful resource.

Special Programs to Support Bird Habitat and Climate Adaptation Goals If your goals involve promoting bird habitat or helping your woods to adapt to climate change, there are opportunities to receive expert advice tailored to your land that you may wish to factor into your planning. See the Resources page for more information about the Foresters for the Birds Program and the Forest Stewardship Climate Plan.



and cross-country skiers, and are

keen to share outdoor recreational opportunities with their community. Part of their property is accessible for sledding, snowmobiling, and crosscountry skiing. "We've been encouraging people to hike on our land, partly because we're trying to make sure other people learn ... the benefits of forests," explained Jack. The Lochheads enjoy time out on their trails and observing wildlife (they have recently installed trail cameras), harvest their own firewood, and have spent many hours clipping and spraying invasive plants, including Japanese knotweed that was degrading riverbank habitat. Although timber production is not a priority goal, their forester has overseen several harvests on the property, resulting in a modest profit.

Outdoor Recreationist

Here are some examples of how these goals may apply in your woods:

You may improve access for walking, skiing, and recreation by creating trails. To maintain or enhance privacy, you may reroute trails away from a house site, or plant trees to shield your viewshed. If your goal is to preserve or improve scenic beauty, you may decide to clean up an old trash pit, or cut trees to open a vista. Trails and views may also improve enjoyment of special features, such as a cellar hole or favorite picnic spot. To improve hunting or fishing, good food and habitat are key; activities may include planting oaks or other nut- or seed-producing trees, cutting back mature stands of aspen to generate younger stands that attract grouse, or adding logs and other woody debris to streams to enhance fish habitat.

Although active timber harvests may interfere with short-term enjoyment of your woods, logging roads can be routed with future trails in mind, and timber cuts can open views or improve habitat for game animals. Habitat and ecosystem goals are also often complementary to recreation, although for intensely used portions of your land, there may be trade-offs. For example, frequent human presence may degrade habitat for some wildlife.

Questions to ask your forester

What are the trade-offs for allowing public access to trails and other amenities?

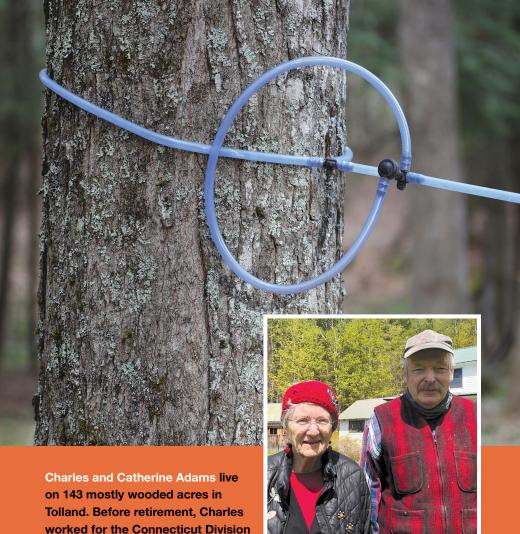
How can I improve fish and game habitat (and what kind of permitting is required for changing stream habitat)?

If I promote desired game species, what are the impacts on other species?

What are good practices for building trails over wet areas?

What and where should I plant to enhance privacy?

How can I design a timber harvest to enhance trails, views, and other points of interest?



worked for the Connecticut Division of Forestry, and along with his son,

ran a logging business. A fifth-generation sugarmaker, Charles sells syrup and maple confections. The couple has previously done small harvests, "maybe a half an acre, an acre," said Charles, "and you can see with the black birch, it really took off." A priority management goal includes gradual timber stand improvement (TSI) in their sugarbush. Charles and Catherine also heat with wood cut from the property and are planning a harvest to remove woolly adelgid-infected hemlocks before the timber value degrades. Charles fly-fishes for native brook trout and the family hikes, snowmobiles, and occasionally hunts in their woods. They enjoy seeing a variety of wildlife, including moose, bears, and bald eagles. Their forester recently informed them that they have New England cottontails on the property.

Working Woodlands Owner

Here are some examples of how these goals may apply in your woods:

You may produce income from timber products and services by harvesting wood, producing maple syrup, or renting out campsites. You may also invest in long-term timber stand improvement, an activity that enhances the quality and/or quantity of forest products. You may produce firewood for personal use, and by growing your own fuel, reduce your dependence on purchased energy. You may practice agroforestry, for example, by sustainably cultivating patches of fiddlehead ferns or stands of witch hazel.

Timber and firewood production can advance other goals. Young, regenerating forest is a necessary habitat type for many bird species as well as other wildlife. Cutting saw logs that will store carbon in buildings makes space for young trees to sequester carbon as they grow. A logging road can have a second life as a favorite recreational trail.

However, unlike some other goals that can be reversed in a relatively short timeframe, no one has ever discovered how to un-cut a tree. That's why it's especially important to get your forester's guidance as you weigh short-term and long-term income opportunities.

Questions to ask your forester

What is the current value of standing timber on my land (which species and size classes), and how will that change over time?

Is there an ideal time to harvest? What are the risks to delay?

What will my woods look like after a harvest?

Are there treatments such as precommercial thinning that will enhance long-term timber value?

Are there plant species I could promote that have commercial value?

Are there financial opportunities for carbon storage and sequestration?

Which tree species are best adapted to my land, and what can I do to favor them?

Are there local uses for my wood? Are there local networks?



Paris Qualles owns 100 mostly wooded acres in North Brookfield and manages the property primarily for habitat and biodiversity. A professional screenwriter and avid outdoorsman, he has had a lifelong fascination with nature. During the past decade, Paris has studied the diverse plants and animals that live on his land. Bird habitat is a priority, and Paris is keen to promote habitat for other wildlife as

well, including the otters that visit his recently improved, spring-fed pond. Working with his forester, he plans to suppress especially harmful invasive plants, including multiflora rosa and Japanese barberry, and plans to reduce the impacts of woolly adelgid by removing infected hemlocks. Thinning, both for habitat and tree health, are also possibilities. "Walk the land, walk it at least once every season," he advised. "And try to vary it. Don't stay on the paths ... you'll discover something new every time you do."

Wildlife Steward

Here are some examples of how these goals may apply in your woods:

You may enhance habitat for birds by promoting understory complexity, and also creating patch cuts for aerial insectivores. Activities to enhance habitat for wildlife may include growing trees that produce fruits and nuts, girdling trees to produce snags and making brush piles. In order to enhance aquatic habitat in streams, ponds, and other wetlands, you may work to suppress aquatic invasive plants such as non-native phragmites and to promote shade trees along the water's edge.

The goal of promoting diversity of plant species and habitat types may involve many of these activities, but it also broadens the lens to consider the complex interactions up and down the food web. For example, you may encourage a variety of native shrubs and plants, which in turn supports the presence of diverse insect and bird life.

The ways that these goals interact with others will often be speciesspecific. So, for example, favoring old forests may enhance habitat for black-throated green warblers, but limit opportunities for New England cottontails. A recreational trail by a rocky slope may have minimal impact on most wildlife, but disrupt denning bobcats.

Questions to ask your forester

Which wildlife species live in my woods now, and where?

Which kind of habitat is realistic for my woods, and are there forestry practices that would improve it? Could grants or the sale of timber offset the costs of this work?

How can I see more wildlife in my woods? Are there ways to enhance conditions for species that I want to encourage?

If I support some species I especially like, how will that impact other species?

Should invasive plant suppression/eradication be part of my plan? Are there outside experts whom I should consult?



Ron and Nina Coler live off the grid on 100 acres of mostly wooded land in Ashfield. Their forest management priorities focus primarily on maximizing carbon storage and carbon sequestration, all

while promoting forest health and wildlife habitat. The Colers are working with their forester to plan longer harvest intervals for mature trees, and to improve overall forest resiliency resulting from climate change-related stressors. "The whole key of what we are working towards," explained Ron, "...is a nature-based solution centered on diversity, including diversity in crown height, structure and species." Ultimately their forest products will be directed toward mass timber or other long-lived wood products. They heat with their own wood, keep bees, grow most of their vegetables, and forage for mushrooms and other wild foods. They have also improved old logging trails for recreation. "We have looped them together," explained Nina. "It's pretty nice. Our kids and grandkids are skiers." They have also worked with neighbors and the Franklin Land Trust to establish conservation restrictions on multiple parcels of land, watersheds, and wildlife corridors.

Nature's Ally

Here are some examples of how these goals may apply in your woods:

You may protect water quality by planting trees along waterways, and also suppress or eradicate invasive plants at the edges of wetlands or woods and in other disturbed areas. You may minimize damage from forest pests by promoting mixed-species stands. All these activities will increase forest resiliency, as will protecting wildlife corridors that cross your land and adding habitat features missing from the greater landscape. To sequester and/or store carbon, you may develop a forestry plan that promotes more carbon storage in the trees and the soil, and/or makes room for new tree growth to absorb carbon from the atmosphere.

Goals in this profile often fit with wildlife habitat and biodiversity goals. Promoting good water quality, for example, increases the diversity of aquatic invertebrates, as well as other organisms higher on the food chain. This in turn improves recreational fishing. Timber harvests designed with climate change in mind can promote disease-and-drought-resistant species and generate funds for invasive plant eradication work.

Questions to ask your forester

How do you expect my woods to respond to climate change during the next several decades?

Are there conditions that make my land vulnerable to specific impacts?

How much disturbance is normal? When should I be concerned?

Under what circumstances should I intervene, versus letting nature take its course?

Are there tree species I should plant or favor to help my woods cope with climate change?

Are there any opportunities to pursue for carbon credits, or other funding for carbon benefits-related management?

Does my land connect important habitat or landscape features beyond its borders?



The Right Path for You

In these pages, you've seen numerous ways that different goals can fit together, and met forest landowners who are managing their woods for multiple outcomes. Now it's your turn to put pen to paper and to fill out your own draft of the Landowner Goals Form – an exciting step in charting your forest's future!

On the opposite page is a list of resources that can help you explore goals in greater depth and connect with foresters and other professionals.

Remember that there are no "right" or "wrong" answers in choosing forest management goals. As the person most familiar with your own interests and values, you are uniquely qualified to make these decisions. Your insights, and your forester's expert guidance, will help you chart a successful path for your woods.

Resources

The following resources can help you learn more about issues related to caring for your forest.

The Department of Conservation and Recreation's Massachusetts Forest Stewardship Program (MFSP) supports and encourages private forest landowners' efforts to manage, enjoy, and care for their land. Our webpage includes links to a variety of resources, as well as downloadable copies of the other booklets in the Caring for Your Woods series, including: A Starting Point, Working with Nature, A Valuable Resource, Adapting to Changing Conditions and Managing for Forest Carbon

www.mass.gov/dcr/stewardship www.mass.gov/dcr/climateforestry

UMass Amherst's Masswoods site offers extensive resources for forest landowners and serves as the main portal for UMass Extension. www.masswoods.org

There you will find information on:

- Chapter 61 programs, including tax calculators and links to the state statutes. Also on this page is a link to the publication Chapter 61: Understanding the Massachusetts Current Use Tax Programs.
- Climate change adaptation and carbon sequestration/ storage, including the publications Increasing Forest Resiliency for an Uncertain Future and Forest Carbon, An Essential Natural Solution for Climate Change.
- Land conservation options, including the publications Protecting Your Legacy: A Massachusetts landowner's guide to conservation-based estate planning, Using a Will to Pass On Your Land and Women on the Land.
- A list of foresters and other forest-related professionals, searchable by town.

Other recommended resources include:

AGROFORESTRY

The USDA offers an overview of agroforestry benefits and practices. Additional resources include the Cornell College of Agriculture and Life Sciences Small Farms program and the Northeast/Mid-Atlantic Agroforestry (NEMA) Working Group. www.usda.gov/topics/forestry/agroforestry

www.usda.gov/topics/forestry/agroforestry www.capitalrcd.org/nema-about-us.html www.smallfarms.cornell.edu/projects/agroforestry

FORESTER AND FOREST PROFESSIONAL DIRECTORIES

The DCR maintains a downloadable list of licensed foresters in the state

www.mass.gov/doc/foresterdirectory

FORESTERS FOR THE BIRDS

This DCR program, managed in partnership with Mass Audubon and the Massachusetts Woodlands Institute (MWI), provides funding assistance to landowners to work with consulting foresters or other professionals to evaluate existing and potential habitat for birds. A sample Foresters for the Birds plan is also available.

www.mass.gov/dcr/birds www.mass.gov/doc/birdplan

MASS AUDUBON

www.massaudubon.org/our-conservation-work/ wildlife-research-conservation/bird-conservationprotection/forest-birds

MASSACHUSETTS WOODLANDS INSTITUTE (MWI) www.masswoodlands.org

HISTORY OF NEW ENGLAND FORESTS

Harvard Museum of Natural History has published a video describing the past two centuries of forest management in New England. Harvard Forest maintains dioramas of pre-European settlement to current day Central New England rural landscapes.

www.youtube.com/watch?v=4YAlq-Whttg https://harvardforest.fas.harvard.edu/dioramas

INVASIVE SPECIES

EDDMapS provides invasive species photographs, descriptions and distribution maps. The Massachusetts page for the USDA National Invasives Species Information Center provides updates, fact sheets and other state resources. The Nature Conservancy's *Don't Move Firewood* campaign offers updates on wood-borne invasive insects and links to other resources.

www.eddmaps.org

www.invasivespeciesinfo.gov/us/massachusetts www.dontmovefirewood.org/map/massachusetts

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